

REMARKS

Claims 1-5, 7-8, 11, 13-15, 32, 34, 41, and 45-55 are currently pending in the application. Claims 1, 32, 41, and 48-50 have been amended. Applicant respectfully submits that no new matter has been added. No claims have been added or canceled. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

Claims 1-5, 7-8, 13-15, 32, 34, 41, 45-52, and 54-55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,974,572 to Weinberg et al. ("Weinberg") in view of U.S. Patent No. 7,031,968 to Kremer et al. ("Kremer"). *Weinberg* discloses a visual Web Site analysis program for facilitating the analysis, management, and load-testing of Web sites. A mapping component scans a Web site over a network connection and builds a site map which graphically depicts the URLs and links of the site. *Kremer* discloses a client-server system for providing web site preview information of web site content and features to users.

Applicant respectfully submits that at least three concepts are of paramount importance in construing the claims of the present application with respect to the prior art: **(1)** a proper interpretation of *underlying architecture*; **(2)** an understanding of how architectural components of an underlying architecture are different from front end components; and **(3)** an understanding of how dynamically visualizing an underlying architecture according to claim 1 is distinct from visualizing front end components.

Applicant has thus amended claim 1 to clearly state that the *architectural components* of the underlying architecture being dynamically visualized are the non-visual components that provide for back end operability of the software system. Claims 32, 41, 48, 49, and 50 have been similarly amended. Applicant respectfully submits that this amendment draws attention to a feature already in the claims and in no way narrows the claims.

Therefore, with regard to the underlying architecture and point 1, claim 1 now explicitly states that: **(a)** the underlying architecture is an architecture of a software system; **(b)** the underlying architecture has a plurality of architectural components; **(c)** the architectural

components are non-visual components; and (d) the architectural components provide for back end operability of the software system. Applicant respectfully submits that no prior art reference may be presented as teaching the features of claim 1 if the reference teaches dynamically visualizing or otherwise working with anything other than an underlying architecture as defined by the above-identified features of claim 1.

Secondly, as noted above, the architectural components of the underlying architecture are non-visual and provide for back end operability of the software system. It is respectfully submitted that front end components are *visible* to end users (hence, not non-visual) and do not provide for back end operability of a software system. For example, as provided on p. 7 of the specification as originally filed, the front end may include a graphical user interface having "content and pages of a website" (emphasis added). Additionally, by definition, it is respectfully submitted that front end components, such as in the previous example, present information to an end user rather than provide for back end operability. In contrast, as provided in p. 7 and p. 18 of the specification, back end components, in various embodiments of the claimed invention, may include software and hardware components that make the operability of the front end possible.

Thirdly, as described in Applicant's background section, dynamically visualizing architectural components of an underlying architecture is a distinct problem because the components are otherwise invisible to users, and hence, are non-visual components. Front end components, in contrast, are already visible to users. Applicant respectfully submits that application of these three concepts reveals the deficiencies of *Weinberg* and *Kremer*.

Applicant respectfully submits that neither *Weinberg* nor *Kremer* are analogous to the invention claimed by claim 1. Instead, Applicant respectfully submits that *Weinberg* and *Kremer* are each concerned with front end issues, and to the extent either visualizes, it visualizes *visual* components.

In the Office Action, the Examiner concedes that *Weinberg* fails to disclose an underlying architecture according to claim 1. Instead, the Office Action cites *Kremer* as disclosing the underlying architecture referred to in claim 1 and continues to rely on *Weinberg* as

teaching the remaining features of claim 1. *Kremer*, however, is concerned with previewing web site content and features to users in order to enable a user to preview a website without actually visiting the website. Applicant respectfully submits that the only relationship *Kremer* bears to claim 1 is that, in order to accomplish its web site preview system, it discloses a client-server system that has a server (often referred to in *Kremer* as a "back end"), as any client-server system must.

Even if it is assumed for sake of argument, that *Kremer* discloses an underlying architecture, Applicant is not attempting to claim an *underlying architecture of a software system* as novel. Indeed, underlying architectures are ubiquitous in the field, thus underscoring the need for the present invention. Instead, in claim 1, Applicant is claiming a method of dynamically visualizing an underlying architecture as novel. *Kremer* fails to describe, discuss, or even allude to the possibility of *any* of the steps of claim 1 related to dynamically visualizing an underlying architecture. Applicant respectfully submits that *Kremer* does not relate to the claimed features of claim 1.

Weinberg, the reference still relied upon by the Office Action as teaching the features of independent claim 1, also relates exclusively to visual components that do not provide for back end operability of a software system. *Weinberg* discloses developing a graphical site map that graphically depicts web sites that are linked to each other. Towards that end, *Weinberg* scans web sites and graphically depicts links between the web sites. Applicant respectfully submits that, by definition, this process relates entirely to the *front end*. As noted above, on p. 7 of Applicant's specification as originally filed, "content and pages of a website" (emphasis added) are expressly considered *front end*.

Also, Applicant respectfully submits that the Examiner's position that *Weinberg* and *Kremer* render claim 1 obvious collaterally renders the steps of claim 1 a nullity. As a threshold issue, to meet claim 1, the prior art must dynamically visualize an underlying architecture and the underlying architecture must have the four characteristics required by claim 1 (listed above). Applicant respectfully submits that, if *Weinberg* does not disclose an underlying architecture

according to claim 1, as conceded by the Examiner, then it also does not disclose any of the following steps relating to the underlying architecture, including:

accessing a datafile *descriptive of the underlying architecture*;

transforming the datafile *to determine architectural components used to form the underlying architecture*;

rendering, via a visualizer, a plurality of *graphical elements representative of the architectural components*, the graphical elements forming a *graphical representation of the underlying architecture*, the graphical representation dependent on a particular mode of a plurality of modes of operation of the visualizer;

displaying, on a web page, the *graphical representation of the underlying architecture of the software system*;

performing a graphical operation on the web page distinct from the rendering step for dynamic visualization of the graphical elements *representative of the architectural components of the underlying architecture of the software system*;

wherein the dynamic visualization provides a *graphical representation of collaborative interactions between the architectural components of the underlying architecture* of the software system;

communicating *the rendered graphical representation* across the network;

and

wherein the visualizer is *utilized for visualizing, using the web page, the underlying architecture of the software system* during conceptual, development and deployment phases of the software system; and

wherein the *architectural components of the underlying architecture are non-visual components that provide for back end operability of the software system*.

(emphasis added). Applicant respectfully submits that, for this reason, claim 1 distinguishes over the combination of *Weinberg* and *Kremer*.

Finally, Applicant respectfully submits that *Weinberg* may not be modified in the manner of *Kremer*, as indicated by the Office Action, to obviate claim 1. Applicant respectfully submits that the Office Action's position that claim 1 is obvious may be reduced to the following three steps: 1) the system in *Kremer* has an underlying architecture (although *Kremer* discloses an unrelated invention); 2) *Weinberg* discloses visualization (although admittedly not of architectural components of an underlying architecture); and 3) therefore, any visualization of an underlying architecture is obvious. Applicant respectfully submits that there is a fatal gap between *Weinberg* and *Kremer* in linking between an underlying architecture and an entirely unrelated visualization in *Weinberg*. As mentioned above, as it relates to the claimed invention, *Kremer* does not add anything material to *Weinberg*. Additionally, in *Weinberg*, access to architectural components of an underlying architecture is not even necessary to develop the graphical site map.

Moreover, the principles of *Weinberg* are not applicable to dynamically visualizing an underlying architecture. By scanning web sites, *Weinberg* searches web sites for links so that it may graphically depict the links. Applicant respectfully submits that this is not a procedure conducive to developing *dynamic visualization of an underlying architecture of a software system* according to claim 1. For at least these reasons, Applicant respectfully submits that claim 1 distinguishes over the combination of *Weinberg* and *Kremer*.

Applicant respectfully submits that, for each of the above independent reasons, claim 1 distinguishes over the combination of *Weinberg* and *Kremer*. Withdrawal of the 35 U.S.C. § 103 rejection of independent claim 1 is respectfully requested.

Independent claim 32 is directed to a computer-readable medium having stored thereon sequences of instructions. Applicant respectfully submits that, for similar reasons set forth above with respect to the rejection of independent claim 1 as rendered obvious by *Weinberg* and

Kremer, independent claim 32 distinguishes over combination of *Weinberg* and *Kremer*. Withdrawal of the rejection of independent claim 32 is respectfully requested.

Independent claim 41 is directed to an application service provider (ASP) system for visualizing an underlying architecture of another distinct software system. Applicant respectfully submits that, for reasons similar to those set forth above with respect to the rejection of independent claim 1 as rendered obvious by *Weinberg* and *Kremer*, independent claim 41 distinguishes over the combination of *Weinberg* and *Kremer*. Withdrawal of the rejection of independent claim 41 is respectfully requested.

Independent claim 48 is directed to a method for providing a visualization of an underlying architecture of a software system within a network. Applicant respectfully submits that, for reasons similar to those set forth above with respect to the rejection of independent claim 1 as rendered obvious by *Weinberg* and *Kremer*, independent claim 48 distinguishes over the combination of *Weinberg* and *Kremer*. Withdrawal of the rejection of independent claim 48 is respectfully requested.

Independent claim 49 is directed to a computer-readable medium having stored thereon sequences of instructions. Applicant respectfully submits that, for reasons similar to those set forth above with respect to the rejection of independent claim 1 as rendered obvious by *Weinberg* and *Kremer*, independent claim 49 distinguishes over the combination of *Weinberg* and *Kremer*. Withdrawal of the rejection of independent claim 49 is respectfully requested.

Independent claim 50 is directed to an application service provider (ASP) system for visualizing an underlying architecture of another distinct software system. Applicant respectfully submits that, for reasons similar to those set forth above with respect to the rejection of independent claim 1 as rendered obvious by *Weinberg* and *Kremer*, independent claim 50 distinguishes over the combination of *Weinberg* and *Kremer*. Withdrawal of the rejection of independent claim 50 is respectfully requested.

Dependent claims 2-5, 7-8, 11, 13-15, 34, 45-47, and 54-55 each depend from and further restrict in a patentable sense one of independent claims 1, 32, 41, and 48-50. For at least the reasons given with respect to independent claims 1, 32, 41, and 48-50, Applicant respectfully submits that dependent claims 2-5, 7-8, 11, 13-15, 34, 45-47, and 54-55 also distinguish over the combination of *Weinberg* and *Kremer*. Applicant respectfully requests that the 35 U.S.C. § 103 rejection of dependent claims 2-5, 7-8, 13-15, 34, 45-47, and 54-55 be withdrawn.

In view of the above amendment, Applicant respectfully submits that the present application is in condition for allowance. A Notice to that effect is respectfully requested.

Dated: March 12, 2008

Respectfully submitted,

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